

**ADVANCED PLACEMENT EXAMINATION TRENDS
IN SOUTH CAROLINA PUBLIC SCHOOLS
1995 THROUGH 1999**

For more than forty years, the Advanced Placement (AP) Program has given students an opportunity to take college-level courses while still in high school. At present, AP offers 33 courses in a variety of subject areas such as history, math, foreign language, English literature, computer science, and statistics.

Since 1984, each school district in South Carolina has been required to provide AP courses in all secondary schools that include grades 11 or 12. These courses prepare students for the national AP examinations given yearly. Students who score 3, 4, or 5 on an AP exam are generally considered qualified to receive credit for the equivalent course(s) at colleges and universities that give credit for AP exams. In 1999, the last year of the present study, 172 South Carolina high schools participated in the AP test program.

During the years 1995 through 1999, inclusive, the number of public school students participating in the AP examination program in South Carolina rose 10 percent from 8,522 to 9,408. The number of exams taken by those students rose 14 percent from 13,139 to 14,984, and the number of students scoring between 3 and 5 rose 24 percent, from 6,635 to 8,245. Females took an average of 8,163 exams per year during the five-year period, while males took an average of 6,074. White students took an average of 10,622 exams each year, while African-American students took an average of 1,969. The table below provides information on the number of exams taken (all exams combined) and the percentage of students scoring between 3 and 5 in each of the five years of the present study. (For tables of results for individual AP exams, see the Appendix.)

**AP EXAM RESULTS, 1995 THROUGH 1999
ALL EXAMS**

NUMBER OF EXAMS TAKEN

PERCENTAGE of 3 to 5 SCORES

	1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
All	13,139	13,896	14,177	14,994	14,984		50.5	51.1	53.5	54.1	55.0
Male	5,572	6,003	6,250	6,269	6,280		54.3	55.8	57.3	58.9	58.8
Female	7,567	7,893	7,927	8,725	8,704		47.7	47.4	50.4	50.7	52.3
Afr.- Amer.	1,801	2,049	1,912	2,053	2,034		21.1	23.6	22.6	21.0	24.9
White	9,839	10,298	10,585	11,195	11,194		54.5	55.4	58.3	59.8	59.6

For the test-taking population as a whole during the five-year period, some of the most dramatic increases in percentage of students scoring between 3 and 5 came in Chemistry (42.1 to 53.2); Computer Science A (21.5 to 56.0); English Language and Composition (41.8 to 66.4); Government and Politics: Comparative (17.6 to 44.4); Latin: Vergil (35.2 to 60.0); Math: Calculus AB (48.4 to 59.8); and Physics C: Electricity and Magnetism (50.8 to 67.1).

For half of the AP exams, there was a decrease in the percentage of students scoring between 3 and 5 during the study period. Some of the most dramatic reductions in percentage of students scoring between 3 and 5 came in History of Art (82.6 to 58.6); Studio Art: General (79.7 to 61.5); Music Theory (65.5 to 47.6); Physics C: Mechanics (72.3 to 57.1); and percentages of all of the

contemporary foreign language students scoring between 3 and 5 declined (French Language from 41.4 to 24.4, French Literature from 75.0 to 42.9, German Language from 72.2 to 47.8, and Spanish Language from 46.9 to 43.6).

Overall, more of the increases in percentage of students scoring between 3 and 5 were in math, science, and computer science subject areas, while more of the decreases in percentage of students scoring between 3 and 5 were in the arts, music, and contemporary foreign language subject areas. (Some of the variation may relate to the fact that smaller numbers of students take certain art and foreign language AP courses than math or science courses.)

For the overall population, a few subject areas remained very steady in terms of both number of participants and percentage of students scoring between 3 and 5: U.S. History, Biology, English Literature and Composition, European History, and Physics B.

For exams where at least 25 students participated in at least 3 of the 5 years, females and white students participated in a larger number of exams than did males and African-American students. Females participated in 24 test areas, as did white students; males participated in 22 test areas; and African-American students participated in 11 test areas.

White students outnumbered African-American students by a wide margin as test participants in all exams and for all years. In 1999, for example, 11,194 white students took AP exams while 2,034 African-American students did.

White students outnumbered African-American students by a generally wide margin in percentage of students scoring between 3 and 5, except in three years for Studio Art: General and one year for Latin: Vergil. In 1999, the percentage of white students scoring between 3 and 5 on all exams was 59.6; for African-American students, it was 24.9.

For African-American students, the percentage of students scoring between 3 and 5 rose from 21.1 to 24.9 during the period. The most dramatic increases in percentage of students scoring between 3 and 5 came in English Language and Composition (12.9 to 31.4), European History (31.8 to 47.4), and Math: Calculus AB (16.0 to 27.9).

For African-American students, the only dramatic decrease in percentage of students scoring between 3 and 5 came in Government and Politics: U.S. (27.8 to 13.6).

The percentage of white students scoring between 3 and 5 rose from 54.5 to 59.6 during the period. The most dramatic increases in percentage of white students scoring between 3 and 5 came in Chemistry (43.6 to 55.0), Computer Science A (23.8 to 59.4), English Language and Composition (44.0 to 71.2), Latin: Vergil (30.0 to 60.0), Math: Calculus AB (53.4 to 64.3), Physics B (41.8 to 53.6), and Physics C: Electricity and Magnetism (46.8 to 65.5).

For white students, the most dramatic decreases in percentage of students scoring between 3 and 5 came in History of Art (83.3 to 61.7), Studio Art: General (79.3 to 60.4), Economics: Micro (61.9 to 54.8), French Language (42.0 to 27.5), Music Theory (72.6 to 50.9), and Physics C: Mechanics (71.6 to 57.8).

During the study period, the percentage of male students scoring between 3 and 5 rose from 54.3 to 58.8 and for female students from 47.7 to 52.3.

Females outnumbered males as test participants in all exams and for all years in the five-year period except for Computer Science A and AB (all years), Math: Calculus BC (all years), the three Physics courses (all years), and two years of Studio Art: Drawing, three years of Chemistry, three years of Economics: Micro, two years of Government and Politics: Comparative, two years of Music Theory, and one year of Statistics. Equal numbers of males and females took Latin: Vergil in 1995.

Males outnumbered females in percentage of students scoring between 3 and 5 in all exams and for all years except for three years of Studio Art: Drawing, two years of Studio Art: General, one year of Economics: Micro, two years of English Literature and Composition, one year of European History, one year of French Language, four years of French Literature, four years of German Language, one year of Government and Politics: Comparative, one year of Latin: Vergil (tie in 1997), three years of Latin: Catullus Horace, three years of Music Theory, one year of Physics C: Mechanics, one year of Psychology, one year of Spanish Language, and one year of Spanish Literature (first offered 1999).

For male participants over the five-year period, the most dramatic increases in percentage of students scoring between 3 and 5 came in Studio Art: Drawing (74.2 to 86.1), Computer Science A (28.4 to 59.8), English Language and Composition (47.5 to 69.3), Physics B (46.9 to 56.3), and Physics C: Electricity and Magnetism (51.2 to 68.4).

For males, the only dramatic decreases in percentage of students scoring between 3 and 5 came in Music Theory (61.5 to 40.0) and Psychology (62.7 to 50.9).

For female participants over the five-year period, the most dramatic increases in percentage of students scoring between 3 and 5 came in Chemistry (30.3 to 47.7), Computer Science A (7.4 to 39.5), English Language and Composition (38.7 to 64.8), European History (64.1 to 76.3), Latin: Vergil (44.4 to 100.0), and Math: Calculus AB (45.0 to 58.2).

For females, the most dramatic decreases in percentage of students scoring between 3 and 5 came in History of Art (75.9 to 60.5), Studio Art: Drawing (85.2 to 70.5), Studio Art: General (83.1 to 57.8), French Language (46.0 to 22.8), Music Theory (70.0 to 53.8), and Physics C: Mechanics (79.4 to 47.5).

CONCLUSIONS

The AP exam results for 1995 through 1999 suggest that the greatest area of concern is participation and achievement among African-American students. Far fewer African-American students than white students took AP exams: white students took an average of 10,622 exams each year of the study period, while African-American students took an average of 1,969 exams. The difference between the percentage of white and African-American students scoring between 3 and 5 was also wide: the percentage of white students scoring between 3 and 5 ranged from 54.5 to 59.6 during the study period, while the percentage of African-American students scoring between 3 and 5 ranged from 21.1 to 24.9. Also, the achievement gap increased during the study period: the percentage of 3 to 5 scores among white students increased 5.1 points while the percentage of 3 to 5 scores among African-American students increased 3.8 points.

Another area of concern is the fact that female participation generally surpassed male participation, yet female achievement lagged behind male achievement. Females took an average of 8,163 exams per year during the five-year period, while males took an average of 6,074. The

percentage of male students scoring between 3 and 5 ranged from 54.3 to 58.8 during the study period, while the percentage of female students scoring between 3 and 5 ranged from 47.7 to 52.3.

Finally, the number of students overall who scored between 3 and 5 on AP exams during the study period increased 24 percent, while the number of students taking AP exams increased only 10 percent. This difference may suggest that larger numbers of the more well-prepared students are being attracted to AP programs and courses.

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